

### ***Amendments to the Specification***

Please replace paragraph [0042], which bridges pages 10 and 11 with the following:

The foil is etched in an electrolyte fluid that promotes electrochemical etching. The electrolyte comprises a halide and/or oxyhalide, preferably a chloride and/or oxychloride, and an oxidizer such as hydrogen peroxide, sodium perchlorate, sodium persulfate, cerium sulfate or sodium periodate. The pH of the electrolyte is maintained in the range of about 0.0 to about 8.0, preferably a pH of about 1.0 to about 3.0. An acid is added to the electrolyte to maintain the pH, for example hydrochloric acid. Alternative acids for use in the present invention include but are not limited to sulfuric, nitric, hydrobromic, and hydrofluoric acids; or organic acids such as formic, acetic, citric and para-toluenesulfonic acid. Other surface area enhancing etch solutions can be used with the present invention to produce similar results. In one embodiment, the electrolyte etch solution comprises about 1-3% sodium chloride and about 2-5% sodium perchlorate or sodium persulfate. Preferably, the electrolyte etch solution comprises about 1.3 % by weight NaCl and about 3.5 % by weight NaClO<sub>4</sub>. The electrolyte is heated to a temperature of about 80°C to about 100°C, with a preferred temperature of about 85°C. The foil is placed in the etch electrolyte and etched at a current density of about 0.1 to about 0.3 Amps/cm<sup>2</sup>, preferably about 0.15 Amps/cm<sup>2</sup>. The current density corresponds to an etch charge of about 5 to about 50 Coulombs/cm<sup>2</sup> for a specific amount of time, preferably about 36 Coulombs/cm<sup>2</sup> for about 4 minutes. The foil is etched to produce an enlargement of surface area of at least about 20 times. In one embodiment, the foil is placed in an electrochemical bath having an anode portion containing the anode or etch electrolyte and a cathode portion. The electrolyte is heated to a temperature of about

80°C to about 90°C. The foil is connected to a charge source in the anode portion of the bath and a charge is applied to the foil. The charge is monitored on the foil and the etching is stopped when the charge reaches a predetermined level. In one example, the foil is etched at a current density of about 0.1 to about 0.25 Amps/cm<sup>2</sup> and the etching is stopped when the charge on the foil reaches a predetermined level in the range of about 15 to about 50 Coulombs/cm<sup>2</sup>.